

* The Life Cycle Hypothesis:

Ando and Modigliani have formulated a consumption function which is known as the life cycle hypothesis. According to this hypothesis, consumption is a function of lifetime expected income of the consumer. The consumption of the individual consumer depends on the resources available to him, the rate of return on capital, the spending plan, and the age at which the plan is made. The present value of his resources includes income from assets or wealth or property and from current and expected labour income. Thus his total resources consist of his income and wealth.

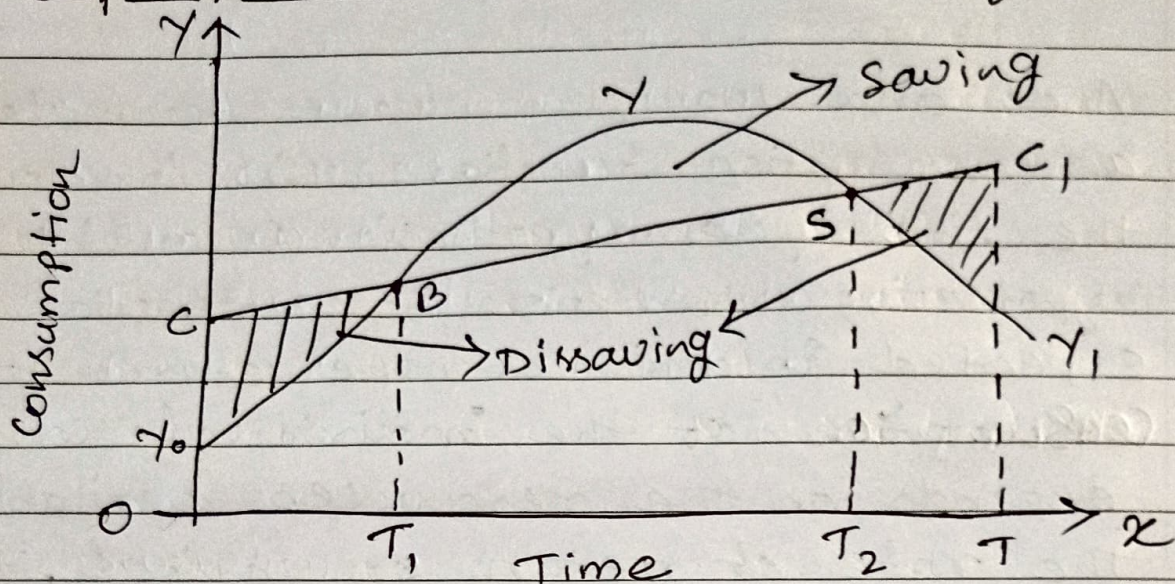
• Assumptions:

- ① there is no change in the price level during the life of the consumer.
- ② the rate of interest paid on assets is zero.
- ③ the consumer does not inherit any assets and his net assets are the result of his own savings.
- ④ His current saving result in future consumption.
- ⑤ the consumer is rational.

In the given assumption, the aim of the consumer is to maximise his utility over his lifetime, ~~given~~ which will, in turn, depend on the total resources available to him during his lifetime.

Given the life-span of an individual, his consumption is proportional to these resources. But the proportion of resources that the consumer plans to spend will depend on whether the spending plan is formulated during the early or later years of his life. As a rule, an individual's average income is relatively low at the beginning of his life and also at the end of his life. This is because in the early years of his life, he has little assets. and during the late years, his labour income is low.

• Explain with the help of Diagram:



In the above Diagram shown as the Time period indicate in X-axis and Consumption level is represent in Y-axis. The C_1 curve is consumption ~~at~~ level of individual which slightly increasing or constant. The $Y_0 Y_1$ curve shows the individual consumer's income Stream during his lifetime T . During the early period of his life represented by T_1 in the figure, he borrows or dissaves $C_1 Y_0 B$ amount of money to keep consumption level C_B which is almost constant. In the middle years of his life represented by T_1, T_2 , he saves $B S Y$ amount to repay his debt and for the future. In the last years of his life represented by T_2, T , he dissaves $S C_1 Y_1$ amount.

Its criticisms:

- ① plan for lifetime consumption unrealistic.
The contention of Ando and Modigliani that a consumer plans his consumption over his lifetime is unrealistic because a consumer focused more on the present rather than on the future which is uncertain.
- ② Consumption not directly related to Assets:
The life cycle hypothesis pre-supposes that consumption is directly related to the assets of an individual. As assets increase, his consumption increases and vice-versa. This is also unwarranted because an individual may reduce his consumption to have larger assets.
- ③ Consumption depends on Attitude: Consumption depends on ~~one money variables~~ attitude towards life. Given the same income and assets, one person may consume more than the other.
- ④ Consumer not Rational and knowledgeable:
This hypothesis assumes that the consumer is rational and has full knowledge about his income and future lifetime. This is unrealistic because no consumer is fully rational and knowledgeable.

MATHEMATICALLY EXPLANATION

According to this theory, consumption is a function of lifetime expected income of the consumer which depends on his resources. In some resources are -

- (i) His current income (y_t)
- (ii) present value of his future expected labour income (y_{1t}^e).
- (iii) present value Assets (A_t)

Consumption function expressed \rightarrow

$$C_t = f(v_t) \text{ ----- (i)}$$

where, $v_t =$ Total resource at time t .

$$v_t = f(y_t + y_{1t}^e + A_t) \text{ ---- (ii)}$$

By substituting eqn (ii) in (i), now get linear and weighted average of different income groups, the aggregate consumption function is

$$C_t = \alpha_1 y_t + \alpha_2 y_{1t}^e + \alpha_3 A_t$$

$\alpha_1 =$ MPC of current income.

Now APC is

$$\frac{C_t}{y_t} = \alpha_1 + \alpha_2 \frac{y_{1t}^e}{y_t} + \alpha_3 \frac{A_t}{y_t}$$

APC is constant in the long-run because a portion of labour in current income and the ratio of total assets to current income are constant when the economy grows.

on the basis of the life cycle hypothesis, Ando and Modigliani made a number of studies in order to formulate the short-run and long-run consumption functions. In low income level were at the end of their lives. Thus their APC is high. On the other hand, where income level is high on the middle age of lives then APC is relatively low.